INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 12-20
Technical Advisory

September 25, 2012

TO: **All Design, Operations, and District Personnel, and Consultants**

FROM: ***/s/ Elizabeth W. Phillips***
Elizabeth W. Phillips
Manager, Office of Bridge Standards and Policy
Division of Bridges

SUBJECT: **AASHTO *LRFD Bridge Design Specifications, 2012*, affects on *Indiana Design Manual***

REVISES: ***Manual* Sections and Figures Listed Below**

EFFECTIVE: **Stage 2 submission on or after December 21, 2012**

The *Indiana Design Manual* has been revised for accordance with the subject *LRFD* edition. A significant change in the requirements for railroad-grade separation structures is part of these revisions. If your project contains a railroad-grade separation, contact the INDOT project manager, regardless of the project development stage, to determine how these changes may affect the project.

The affected Part 4 Sections are as follows:

403-3.05	Earthquake Effects
403-3.07	Vehicle Collision with Structure
403-4.02	Application of Construction Loadings
406-4.02	Normal Weight and Lightweight Concrete
406-4.03	Lightweight Concrete
406-12.02(03)	Indiana Bulb-Tee Beam
408-2.01(04)	Sliding Stability and Eccentricity
409-2.0	Integral Abutment
409-2.01	General (Integral Abutment)
409-2.03(02)	Passive Earth Pressure

409-2.04(01)	General Requirements (Integral Abutment Design Requirements)
409-2.04(02)	Pile Connection and Plans Details
409-4.03(01)	Construction Joint
409-5.01	General (Cantilever Abutment and Wingwalls)
409-6.03(02)	Roadway-Grade Separation
409-6.03(03)	Railroad-Grade Separation
409-7.03(03)	Determining Standard Bearing-Device Type
410-6.04(05)	Limiting Eccentricity Due to Overturning

The affected Part 4 Figures are as follows:

403-3F	Seismic Analysis Requirements for Integral and Non-Integral Structures, *new figure*
403-4A	Construction-Loadings Information to be Shown on General Plan
409-2A	Use of Integral Abutment
409-2B	Intermediate Pier Detail for Integral Structure Located in Seismic Area with Seismic Design Category Greater than A, *new figure*
409-2C	Suggested Integral End Bent Details (Beams Attached Directly to Piling, Method A), *was Figure 409-2B*
409-2D	Suggested Integral End Bent Details (Beams Attached Directly to Concrete Cap, Method B), *was Figure 409-2C*
409-2E	Spiral Reinforcement, *new figure*
409-2F	Tooth Joint, *new figure*
409-2G	Integral Abutment Placed Behind MSE Wall, *new figure*

The revised Chapters appear on the Department's website at http://www.in.gov/indot/design_manual/2353.htm. The affected Section headings and Figures are shown as revised or added October 2012 with affected copy highlighted in yellow. See memo attachment for specific text revisions.

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